



Fault diagnosis of industrial systems by conditional Gaussian network including a distance rejection criterion

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Auteur	Verron, Sylvain [1], Tiplica, Téodor [2], Kobi, Abdessamad [3]
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Mots-clés	Bayesian [4], Conditional [5], distance [6], fault [7]
Résumé en anglais	<p>The purpose of this article is to present a method for industrial process diagnosis with Bayesian network, and more particularly with conditional Gaussian network (CGN). The interest of the proposed method is to combine a discriminant analysis and a distance rejection in a CGN in order to detect new types of fault. The performances of this method are evaluated on the data of a benchmark example: the Tennessee Eastman Process. Three kinds of fault are taken into account on this complex process. The challenging objective is to obtain the minimal recognition error rate for these three faults and to obtain sufficient results in rejection of new types of fault.</p>
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